RUSH

Work Order ID 107187 *107187* Page 1 September-23-13 11:16:33 AM Accept Item ID: D2348 *N900040100* Setup Start **Revision ID:** Stop Item Name: Wearplate (Key Way) **Start Date:** 9/23/13 **Start Qty: 20.00 Cust Item ID:** Required Date: 9/23/13 Req'd Qty: 20.00 **Customer:** Reference: Run Start Date: 13-09-23 Tooling: Process Plan: MUコ Approvals: Date: Stop Date: SPC (Y/N): Date: Sequence ID/ Operation Set Up/ Tool ID Tool # Plan Accept Reject Reject Insp. Work Center ID **Description** Code **Qty Qty** Number Stamp **Run Hours Revision Nbr** Draw Nbr D2348 Rev C 100 0.00 FLOW WATER JET JMB-10-22 *100* 0.00 Waterjet Memo FLOW CNC Waterjet 1-Cut as per Dwg D2348 Dwg Rev: Prog Rev: 2-Deburr if necessary QC2-Inspect parts off machine FAI/FAIB 0.00 110 20*110* 0.00 OC Memo Quality Control DAS 27 9-89 0.00 120 QC8- Inspect parts - second check *120* GC 01 21 00.0 QC Memo

Quality Control

NCR: Y	es /	/ No				WORK ORDER NON-C	ON	IFORI	MANCE / UPI	DATE			
											QA Closed:	Date	:
Work Orde	er:		·			DISPOSITION				AGAINST DE	PARTMENT,		
Part N	_	· · · · · · · · · · · · · · · · · · ·				Rework Scrap Use-as-is Work Order Update			Skid-tube Machining noforming Large Fab	Crosstube Small Fab Finishing Composite		Water Jet d. Eng. Coor. re/Packaging Supplier	Engineering Quality Other
Root					Descri	ption of work order update	11	nitial	Act	ion	Sign &		
Cause		Date	Step	Qty	(or Non-conformance	Chi	ief Eng	Descr	ription	Date	Verification	QC Inspector
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Landi	$\overline{}$	e ar Bending			Г	General Bend		Grain			Ovalized	<u> </u>	Pressure/Forced
	\vdash	ending Centre No	ot Conco	ntric to	0/5	BOM/Route	\vdash	Hardwa	aro.	-	Over/Under	tolerance	Temperature/Cure
	${f H}$	racks	or concei	intric to	^{0/3}	Broken/Damaged	\vdash		ion Incomplete	<u></u>	Part Incorre		Weld
	—	rushed/	^rimped		 	Burrs	\mathbf{H}	-	tions incomplete/l	Inclear	Part Lost/Mi	—	Wrong Stock Pulled
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	-	Torque W		Extrusio	n	Drawing	\mathbf{H}		Calibration				* **-
	⊢—	Furning S				Finish		Out of	Sequence				

Outside Dimensions

DQA:

Date:

Wave/Twist in Tube

Folio

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G

September-23-1				^1()	/18/^							Page 2	-
Item ID: Revision ID: Item Name:	D2348 Wearplate (K	ev Wav)		Accept	*N900	040	100)* s	etup	Start Stop		S1* S2*	
Start Date: Required Date: Reference:	9/23/13	Start Qty: 20.00 Req'd Qty: 20.00	*20* *20*		Cust Item Customer:						IV.		
Approvals:			Date:	Tooling: SPC (Y/N):		oate:		R		Start Stop		R1* R2*	
Sequence ID/ Work Center I 150 *150* Outsource4 Outsource process		Operation Description Outsource process-Anodize Memo Issue P/O: Black Anodize Ensure Certifica	1743	Set Up/ Run Hours 0.00 0.00	Tool ID	Tool #	Plan Code	Accept Qty	Reje Qty	N	Reject Tumber	Insp. Stamp)
*160 *160* Packaging		Receive & Inspect for Dama Memo Ensure certifica	ge & Mat'l Certs te of conformity is attac	0.00 0.00 hed				/	14	3/17	bs (Ju)	
170 *17 QC Quality Control		QC5- Inspect part completer Memo INSPECT CER		0.00 DAS 27 9-89 0.00 13 10	: : X		Ø	\$ B					,

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Work Orde						DISPOSITION				AGAINST DE	PARTMENT	/PROCESS		
WOIK OIGE	-					Rework	1		Skid-tube	Crosstube	1	Water Jet	\neg	Engineering
Part N	lo.					Scrap	1		Machining	Small Fab	Pro	od. Eng. Coor.	\exists	Quality
	•					Use-as-is	1	Therm	noforming	Finishing	Rec/Sto	re/Packaging		Other
NCR N	۱o. ₋					Work Order Update]		Large Fab	Composite]	Supplier		
Root			I		Descri	ption of work order update		Initial	Ac	tion	Sign &	}		
Cause	1	Date	Step	Qty	i	or Non-conformance	1	nief Eng	Desc	cription	Date	Verification	n	QC Inspector
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							AUI	LT CATE	GORY					
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		Cracks			_	Broken/Damaged	<u> </u>	- '	on incomplete		Part Incorre		-	Weld
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,		Cuffs				Contamination		Mainte		<u></u>	Part Moved			
		Heat Tre	at			Countersink	L	Mislabe	eled		Positioned	_	_	
		Inspection	n Strip in	Tube		Cut Too Short		Misread	i		Power Loss	/Surge		Other
	1	Pinnles i	Rond			Drill Holes		Offset						

Out of Calibration

Out of Sequence

Outside Dimensions

Turning Sequence

Wave/Twist in Tube

Torque Waves in Extrusion

Drawing

Finish Folio

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G

Work Ord September-23-1.				*1071	87*							Page 3
Item ID: Revision ID: Item Name:	D2348 Wearplate (Ke	ey Way)		Accept	*N900	040	100	ገ*	Setup	Start Stop	1.7	S1* S2*
Start Date: Required Date: Reference:	9/23/13 9/23/13	Start Qty: 20.00 Req'd Qty: 20.00	*20* *20*		Cust Item I Customer:	D:						
Approvals:		in:	Date:	Tooling: SPC (Y/N):		ate:			Run	Start Stop	17	R1* R2*
Sequence ID/ Work Center II 180 *180* Small Fab Small Fab	D	Operation Description Small Fab Memo Install Insert	as per Dwg D2348	Set Up/ Run Hours 0.00	Tool ID	Tool#	Plan Code	Accep Qty	Qt	-	Reject Number	Insp. Stamp 13/10/28
190 *1Q\n* QC Quality Control		QC5- Inspect part comple	teness to step on W/O	0.00 DAS 0.00 27 9-89 0.00 S 10 3	1			<u>90</u>				

200

200 Packaging

Packaging

Identify as per dwg & Stock Location: (16x)

Memo 107928

0.00

0.00

 $20 \times 28 /3 - 10 - 29$ 9-89

										DQA.	Date.	
NCR: Yes	s / No				WORK ORDER NON-	CON	NFORM	MANCE / UP	PDATE	QA Closed:	Date:	. *
Work Order:					DISPOSITION				AGAINST DE			
Part No.					Rework Scrap		ſ	Skid-tube Machining	Crosstube Small Fab	+	Water Jet d. Eng. Coor.	Engineering Quality
NCR No					Use-as-is Work Order Update	}	i	noforming Large Fab	Finishing Composite	Rec/Stor	re/Packaging Supplier	Other
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Cause	Date	Step	Qty		or Non-conformance	Ch	ief Eng	Desc	cription	Date	Verification	QC Inspector
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						AUL	T CATE	GORY				
Landing	_				General	_	1 .		[1		1
	Bending				Bend	l	Grain		i	Ovalized	l l	Pressure/Forced

Hardware

Maintenance

Out of Calibration

Out of Sequence

Outside Dimensions

Mislabeled Misread

Offset

Inspection Incomplete

Instructions Incomplete/Unclear

Over/Under tolerance

Part Incorrect

Part Moved

Part Lost/Missing

Positioned Wrong

Power Loss/Surge

Temperature/Cure

Wrong Stock Pulled

Weld

Other

BOM/Route

Contamination

Countersink

Cut Too Short Drill Holes

Drawing

Finish

Folio

Burrs

Broken/Damaged

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G

Turning Sequence

Wave/Twist in Tube

Ripples in Bend

Crushed/Crimped

Inspection Strip in Tube

Torque Waves in Extrusion

Cracks

Cuffs

Heat Treat

Centre Not Concentric to O/S

Work Ord September-23-				*107	7187*							Page	4
Item ID: Revision ID: Item Name:	D2348 Wearplate (Key Way)		Accept	*N900	040°	100)*	Setup	Start Stop	ı	S1* S2*	
Start Date: Required Date Reference:	9/23/13 e: 9/23/13	Start Qty: 20.00 Req'd Qty: 20.00	*20* *20*		Cust Item I Customer:	D:							
Approvals:	Process I	,	Date:	Tooling: SPC (Y/N):		ate:]	Run	Start Stop	*N *N	R1* R2*	
Sequence ID/ Work Center 1 210 *210* QC Quality Control	iD	Operation Description QC21- Final Inspection -	Work Order Release	Set Up/ Run Hours 0.00	Tool ID	Tool#	Plan Code	Accept Qty	Re		Reject Number	Insp. Stamp	Market.

DI 13-10-29

												DQA:	Date:	
NCR:	Yes	/ No				WORK ORDER NON-	COI	VFORM	AANCE / UP	DATE				•
												QA Closed:	Date:	
Work Ord	or.		ı			DISPOSITION				AGAINST D	DEP.	ARTMENT/	PROCESS	
WOIK OIG	-					Rework	7		Skid-tube	Crosstube	\neg		Water Jet	Engineering
Part	Nο					Scrap	1		Machining	Small Fab	1	Prod	d. Eng. Coor.	Quality
						Use-as-is	1 1		noforming	Finishing	┨		e/Packaging	Other
NCR	No.					Work Order Update	1		Large Fab	Composite	\exists		Supplier	
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Cause		Date	Step	Qty	(or Non-conformance	Ch	nief Eng	Desc	ription		Date	Verification	QC Inspector
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Land	_	Bending				Bend		Grain	•	Г	\neg	Ovalized		Pressure/Forced
	\vdash	Centre N	ot Conce	ntric to		BOM/Route	\vdash	Hardwa	ro			Over/Under	tolerance	Temperature/Cure
	\vdash	Cracks	or conce	inti ic to	⁰ /3	Broken/Damaged	\vdash	4	ion Incomplete	F	_	Part Incorrec		Weld
	\vdash	Crushed	Crimned		\vdash	Burrs		- i `	ions Incomplete/	Unclear	_	Part Lost/Mi		Wrong Stock Pulled
	-	Cuffs	Cimpeu		<u> </u>	Contamination		Mainte	•			Part Moved		
1		Heat Tre	at			Countersink		Mislabe		F		Positioned V	Vrong	
	T	Inspection		Tube	 	Cut Too Short		Misread			_	Power Loss/		Other

Out of Calibration

Out of Sequence

Outside Dimensions

Offset

Turning Sequence

Wave/Twist in Tube

Ripples in Bend

Inspection Strip in Tube

Torque Waves in Extrusion

Drill Holes

Drawing Finish

Folio

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G

Page 1

Work Order ID:

107187

Parent Item:

D2348

Parent Item Name:

Wearplate (Key Way)

Start Date: 9/23/13

Required Date: 9/23/13

Start Qty: 20.00

Required Qty: 20.00

Comments:

IPP Rev A

Removed from 9 Digit 05-12-05 JLM Now on Wateriet 06-07-03 II M

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status DAS
D3996-FE-832-EF		Manufactured	No			180	Each	225.0000	4	80	(2	/	28 988
Self-Clinching Fastener											_/3/	10 /	28 98 9
				Location		Loc Qty	Lo	c Code			•		
				GA ·		225							
•				. 825	02	46							
				857		34							
				960	38 —	145				5 <u>0 </u>			
M6061T6S.063 6061-T6 .063 Sheet		Purchased	No			100	sf	421.6005	0.0198	0.416842 O.5		Jw	13-10-
				Location		Loc Qty	Lo	c Code	0				
				MAT021		421.6005							
				123	135	120.2625							
				124	003	72.113							
				<u>M1</u>	<u>260</u> 75	229.225			19(2500			

											DQA:	Date:	<u> </u>
NCR: Y	'es	/ No				WORK ORDER NON-C	ON	NFORIN	ANCE / UPE		•		
											QA Closed:	Date:	. •
Work Orde	. r.					DISPOSITION				AGAINST DE	PARTMENT	/PROCESS	
WOIK Olde	-					Rework			Skid-tube	Crosstube		Water Jet	Engineering
Part N	۱o					Scrap		1	Machining	Small Fab		d. Eng. Coor.	Quality
NCR N	No					Use-as-is Work Order Update			Large Fab	Finishing Composite	Rec/Stor	re/Packaging Supplier	Other
Root			į		Descri	ption of work order update	ı	nitial	Act	ion	Sign &		
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						F	AUL	T CATE	GORY				
Landi	ng G	ear				General							-
		Bending				Bend		Grain			Ovalized	<u> </u>	Pressure/Forced
,		Centre No	ot Concei	ntric to (o/s	BOM/Route		Hardwa	re		Over/Under	tolerance	Temperature/Cure
		Cracks				Broken/Damaged		Inspecti	on Incomplete		Part Incorre	ct	Weld
	П	Crushed/	Crimped			Burrs		Instruct	ions Incomplete/l	Jnclear	Part Lost/Mi	issing	Wrong Stock Pulled
		Cuffs				Contamination		Mainte	nance		Part Moved		
		Heat Trea	nt			Countersink		Mislabe	eled		Positioned V	Vrong ·	_
	П	Inspectio	n Strip in	Tube		Cut Too Short		Misread	i		Power Loss/	Surge	Other
	П	Ripples in	Bend			Drill Holes		Offset			_		

Out of Calibration
Out of Sequence

Outside Dimensions

Turning Sequence

Wave/Twist in Tube

Torque Waves in Extrusion

Drawing

Finish

Folio

DART AEROSPACE LTD	Work Order:	107187
Description: Wear Plate	Part Number:	D2348
Inspection Dwg: D2348 Rev: C		Page 1 of 1

FIRST ARTICLE INSPECTION CHECKLIST

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
0.250	+/-0.010	0.257	~		JAM OI	
0.648	+/-0.010	0.648	_		r i	
0.795	+/-0.005	0.798	/		11	·
2.046	+/-0.010	2.051	/		١,	
1.295	+/-0.010	1.297	1		24	
Ø0.656	+0.005/-0.000	0.657	1		11	
Ø0.290	+0.003/-0.000	ಿ.296 "	<u> </u>		1.	
Ø0.250	+/-0.010	0.254	~		11	·
0.250	+/-0.010	0.257	_		li	
0.648	+/-0.010	0.648	/		fs.	
1.546	+/-0.005	1.545	/		Įι	-
	•					
			→AS	:		

Measured by: Audited by: 9-89

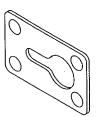
Date: 13-0-21

Audited by: 9-89

Date: Date: Date: Date:

Rev	Date	Change	Revised by	Approved
Α	04.06.25	New Issue P/O D350-616-015	KJ/JLMIU	11
В	10.06.04	Dimensions update per Dwg Rev C	KJ KJ	AM.

QTY -041 ITEM DESCRIPTION X D2348 WEAR PLATE 2 1 D2348F FLAT PATTERN
3 4 D3996-FE-832-EF SELF-CLINCHING FASTENER



107187 MLJ 13-09-23

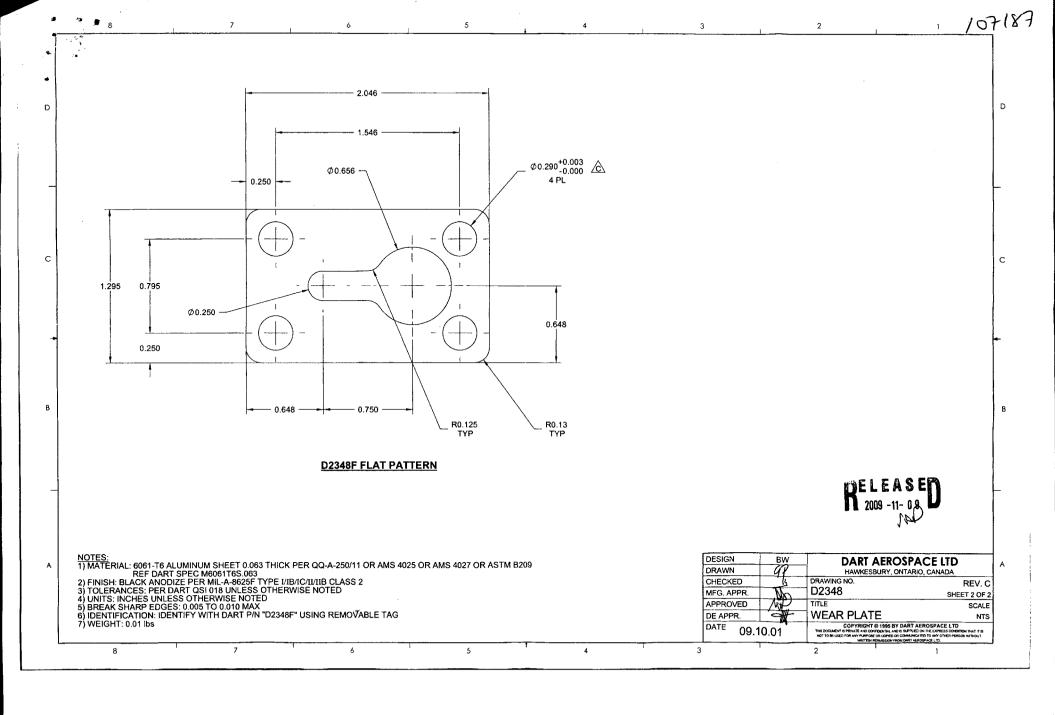
С	REDRAW, ADD +0.003/-0.000 TOL (ZN D4-2), NCR 08-042 CP			09.10.01	
82	CHANG	ED BACK TO	6061-T6	DS	02.02.21
B1	CHANG	ED TO AISI 30	04/316 MATERIAL	DS	00.03.07
В	CHANG	ED PEM INSE	RT TO 8-32	BW	95.02.20
REV.		DESCRIPTION BY DATE			DATE
DESIG	DESIGN		DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA		
DRAWN		9			
CHECKED		- 6	DRAWING NO.	-	REV. C
MFG. APPR.		Z.	D2348	SHEET 1 OF 2	
APPRO	APPROVED #		TITLE		SCALE
DE AP	PR.	-10	WEAR PLATE		NTS
DATE 09.10.01			COPYRIGHT © 1995 BY DART AEROSPACE LTD THIS GOODMENT IS PROVIDE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS		

D3996-FE-832-EF_ SELF-CLINCHING FASTENER 4 PL D2348F-

D2348 WEAR PLATE

С

NOTES:
1) MATERIAL: N/A
2) FINISH: N/A
3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
4) UNITS: INCHES UNLESS OTHERWISE NOTED
5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
6) IDENTIFICATION: IDENTIFY WITH DART P/N "D2348" USING REMOVABLE TAG
7) WEIGHT: 0.01 lbs





A.T.G. Industries Inc. 731, rue Industrielle Rd. PLATING DEPARTMENT Rockland, On K4K 1T2 Canada

Ph: (613) 446-4544 Fax: (613) 446-4556

Pack List

Number: 62704

Date: 25-Oct-13

Ship To

DART AEROSPACE LTD 1270 ABERDEEN ST. HAWKESBURY, ON K6A 1K7 Canada

Ph: 613-632-5200

То

Canada

DART AEROSPACE LTD

HAWKESBURY, ON K6A 1K7

1270 ABERDEEN ST.

Fax: 613-632-1185

Ph: 613-632-5200

Fax: 613-632-1185

Terms Ship Via						
		Ship via				
Quantity	Description					
1 lot	ti / tioo	Rev:				
	2 PCS D4822-1 (28.50) 2 PCS D4822-2 (28.50)					
	HARD ANODIZE BLACK MIL-A-8625 TYPE III CLASS 2					
·/	PRIME-MIL-P-23377J TYPE I CLASS	S N				
	20 PCS D2348 (0.95) BLACK ANODIZE MIL-A-8625 TYPE	II CLASS 2				
	PRICE IS PER PIECE Job: 20130670	PO: 21743 Line:				
	Certificate of Confo	rmance				
	A.T.G. Industries certifies that all items in with all requirements, specifications and dr	this shipment are in conformance rawings referenced in the purchase order.				
	ISO 9001 : 2008 REGIS ATG SALES-2010 TERM DATE : 25/10/13	STERED				
	CERTIFIED SIGNATURE :					
	RECEIVER SIGNATURE :					